

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,807		07/09/2003	Vladimir M. Segal	H0004116-US 8639	
21567	7590	09/20/2005		EXAMINER	
WELLS S		P.S. UE, SUITE 1300	WILKINS III, HARRY D		
SPOKANE		•		ART UNIT PAPER NUMBER	
	•			1742	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			-1
	Application No.	Applicant(s)	
	10/614,807	SEGAL ET AL.	
Office Action Summary	Examiner	Art Unit	
	Harry D. Wilkins, III	1742	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNION (36(a). In no event, however, may a rewill apply and will expire SIX (6) MONO, cause the application to become AE	CATION.  eply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on	•`		
2a) This action is <b>FINAL</b> . 2b) This	s action is non-final.		
3) Since this application is in condition for allowa			
closed in accordance with the practice under to	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims	•		
4) Claim(s) 1-109 is/are pending in the application	n.		
4a) Of the above claim(s) is/are withdra	wn from consideration.		
5) Claim(s) is/are allowed.			
6) Claim(s) is/are rejected.		·	
7) Claim(s) is/are objected to.	14:		
8)⊠ Claim(s) <u>1-109</u> are subject to restriction and/o	r election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examine	er.		
10)☐ The drawing(s) filed on is/are: a)☐ acc	cepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct	-	• • •	).
11) The oath or declaration is objected to by the E	xaminer. Note the attached	Office Action of form P10-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority document			
2. Certified copies of the priority document			
3. Copies of the certified copies of the prior	•	received in this National Stage	
application from the International Burea  * See the attached detailed Office action for a list	, , , , , , , , , , , , , , , , , , , ,	received	
Attachment(s)			
1) Notice of References Cited (PTO-892)		Summary (PTO-413)	
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ol>	<del></del>	s)/Mail Date nformal Patent Application (PTO-152)	
Paper No(s)/Mail Date	6) Other:	**	

Page 2

Application/Control Number: 10/614,807

Art Unit: 1742

## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-15, drawn to a high-purity copper sputtering target, classified in class 148, subclass 432.
  - II. Claims 16-39, drawn to a copper alloy sputtering target, classified in class 148, subclass 432.
  - III. Claims 40-46, drawn to a monolithic copper alloy sputtering target, classified in class 148, subclass 432.
  - IV. Claims 47-58, drawn to a bonded copper alloy sputtering target, classified in class 148, subclass 432.
  - V. Claims 59-62, drawn to a method of forming a monolithic copper alloy sputtering target, classified in class 148, subclass 679.
  - VI. Claims 63-66, drawn to a method of forming a monolithic copper sputtering target, classified in class 148, subclass 679.
  - VII. Claims 67-71, drawn to a method of forming a bonded copper sputtering target, classified in class 148, subclass 679.
  - VIII. Claims 72-78, drawn to a method of forming a bonded copper alloy sputtering target, classified in class 148, subclass 679.
  - IX. Claims 79-93, drawn to a method of forming a copper sputtering target, classified in class 148, subclass 679.

Application/Control Number: 10/614,807

Art Unit: 1742

X. Claims 94-109, drawn to a method of forming a copper alloy sputtering target, classified in class 148, subclass 679.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions I and IX, II and X, III and V/VI and IV and VII/VIII are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the products as claimed can be made by another and materially different process, such as ECAE or cold working.
- 3. Inventions I and II-VIII and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 4. Inventions II and I and III-IX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 5. Inventions III and I, II, IV and VII-X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have

Application/Control Number: 10/614,807

Art Unit: 1742

different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.

- 6. Inventions IV and I-III, V, VI, IX and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 7. Inventions V and I, II, IV and VI-X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 8. Inventions VI and I, II, IV, V and VII-X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 9. Inventions VII and I-III, V, VI, VIII and VII-X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP §

Application/Control Number: 10/614,807 Page 5

Art Unit: 1742

806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.

- 10. Inventions VIII and I-III, V-VII, IX and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 11. Inventions IX and II-VIII and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 12. Inventions X and I and III-IX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects because of the different properties of the different produced sputtering targets.
- 13. Because these inventions are distinct for the reasons given above and the search required for any Group is not required for any other Group, restriction for examination purposes as indicated is proper.

Art Unit: 1742

14. With respect to group III, this group contains claims directed to the following patentably distinct species of the claimed invention: (a) copper alloy targets (claims 41-43) and (b) high-purity copper targets (claim 44).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 40, 45 and 46 are generic.

15. With respect to group IV, this group contains claims directed to the following patentably distinct species of the claimed invention: (a) copper alloy targets (claims 48-50) and (b) high-purity copper targets (claim 51).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 47 and 52-58 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Application/Control Number: 10/614,807

Art Unit: 1742

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- 16. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 17. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D. Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V. King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/614,807 Page 8

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harry D Wilkins, III

Examiner

Art Unit 1742

hdw